Utah Department of Transportation
Traffic Management Division

April 2016

Monthly Report

2060 South 2760 West Salt Lake City, Utah 84104 801-887-3710 www.udottraffic.utah.gov

Mission of the Traffic Management Division

- To Support UDOT and the Department of Public Safety to Achieve Zero Fatalities.
- To Help Provide Reliable and Efficient Travel Throughout Utah.
- To Provide Useful and Timely Real-time Traffic Information.
- To Work Together with Other Government Agencies to Serve the Public.
- To Provide Excellent Customer Service.

Traffic Operations Center

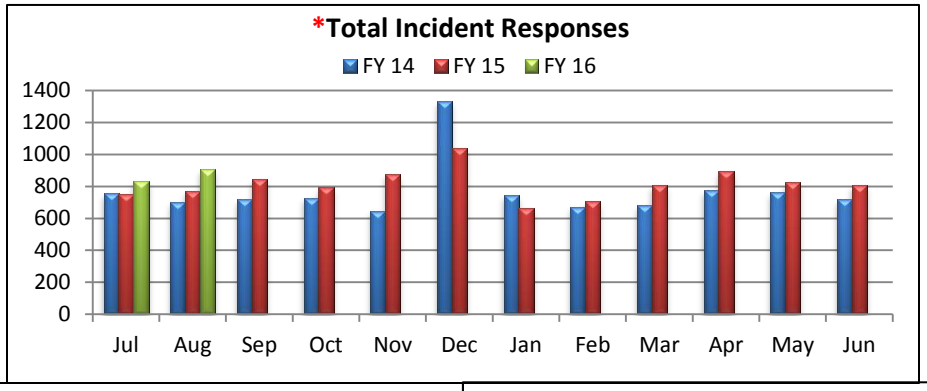
Field Devices Summary

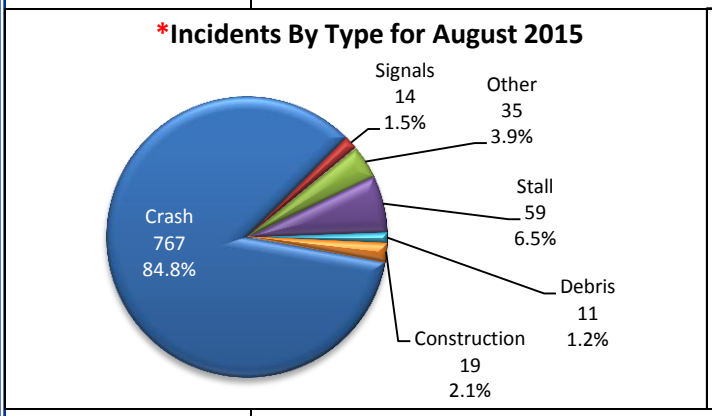
Freeway PTZ Cameras	384
Surface Street PTZ Cameras	468
RWIS & Contracted Weather Cameras	214
Viewable Detection Cameras	59
Total Cameras	1,125
Freeway VMS	98
Surface Street VMS	51
Portable TOC VMS	7
Legacy Trucks Prohibited VMS	21
Variable Speed Limit VMS	15
Chain-Up / Avalanche Warning Signs	21
Total VMS	213
HAR (27 permanent/5 portable)	32
RWIS	97
Ramp Meters	63
TMS	547
Express Lane Plazas	73
Traffic Signals	2,148

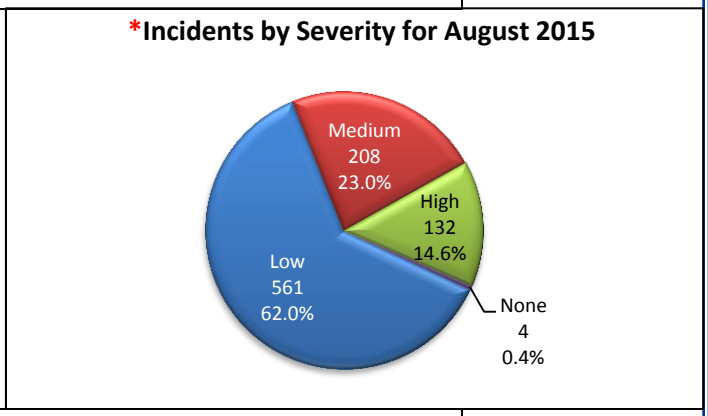
Operations Summary

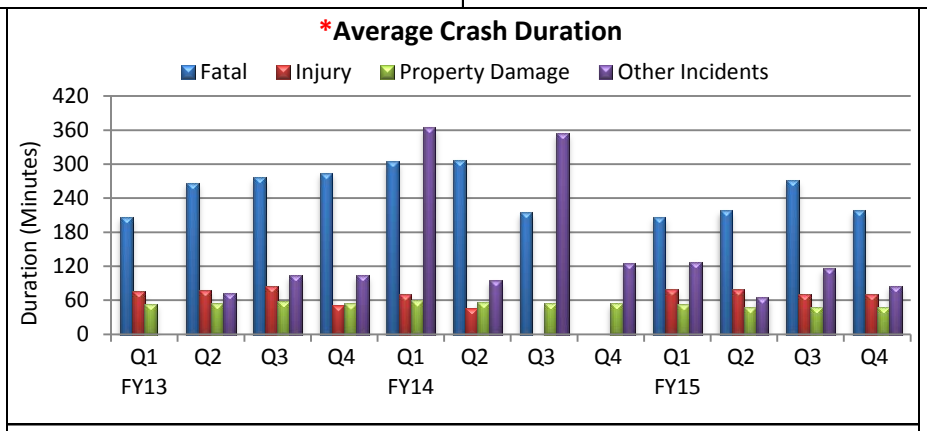
VMS Messages Displayed	84,041
Signal Timing Work Orders	28
Signal Maintenance Work Orders	171
All New Work Orders	438
Work Orders Closed During the Month	403
Incident Responses by the TOC	905
Incident Duration Average Minutes	58
IMT Assists	2,318
Website Visitor Sessions	141,873
511 Calls	13,439
Weather Desk Calls	350
Ask Commuterlink Questions	129
Average Speed AM Peak (07:00-08:00)	68.61
Average Speed PM Peak (17:00-18:00)	61.85
Incidents Using Signal Timing Assistance	190
UDOT Traffic Followers and Re-tweets	382,263
UDOT Traffic App Total Downloads	3,375

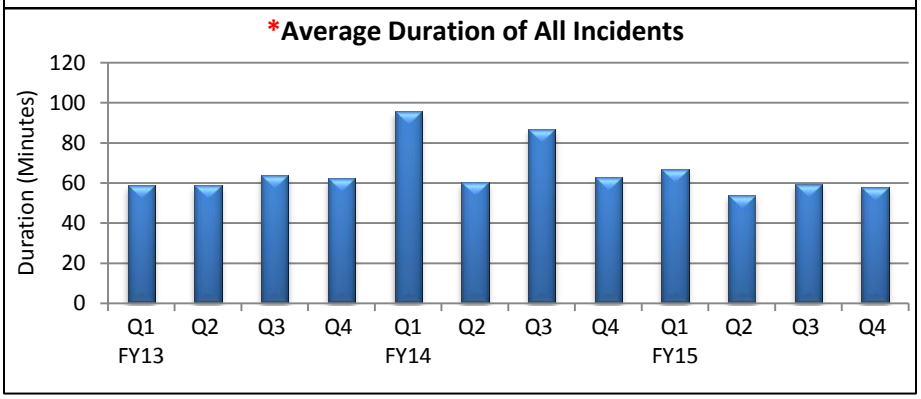
An incident response occurs each time an incident is recorded in the ATMS system. These can be of several types, including crash, construction, debris, stall, congestion, or other. Crashes are separated into three subcategories: property damage, personal injury, and fatal. Each time an incident is created, information is sent to the 511 system, the website, and to the public through email alerts. An incident remains active until it has been completely cleared from the roadway.

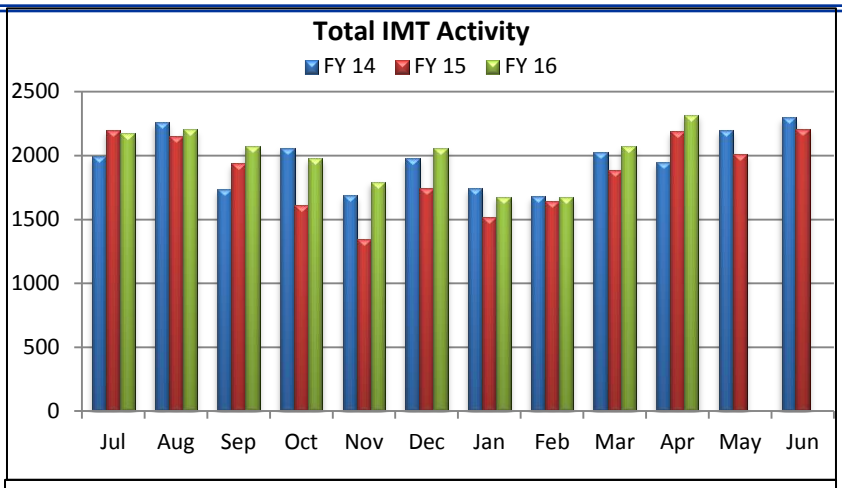


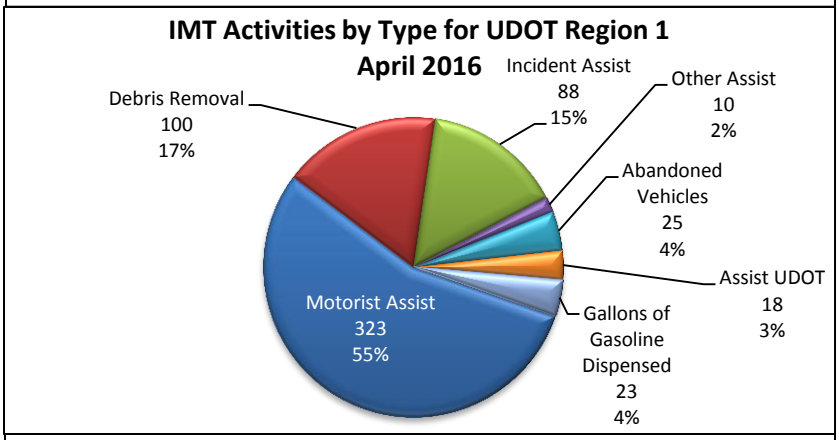


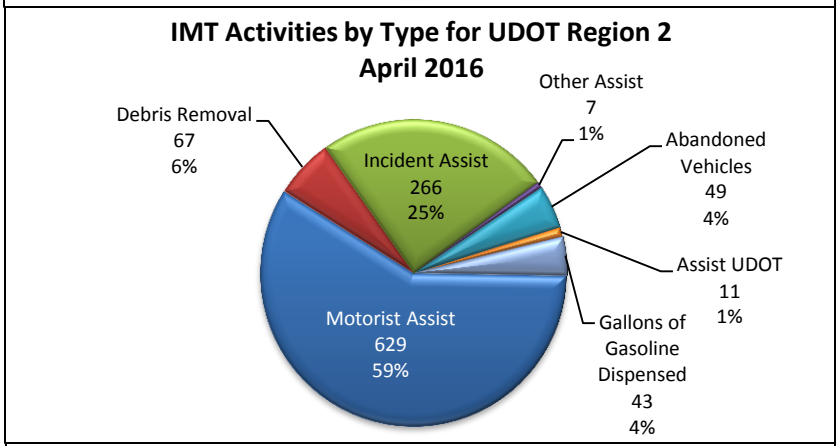


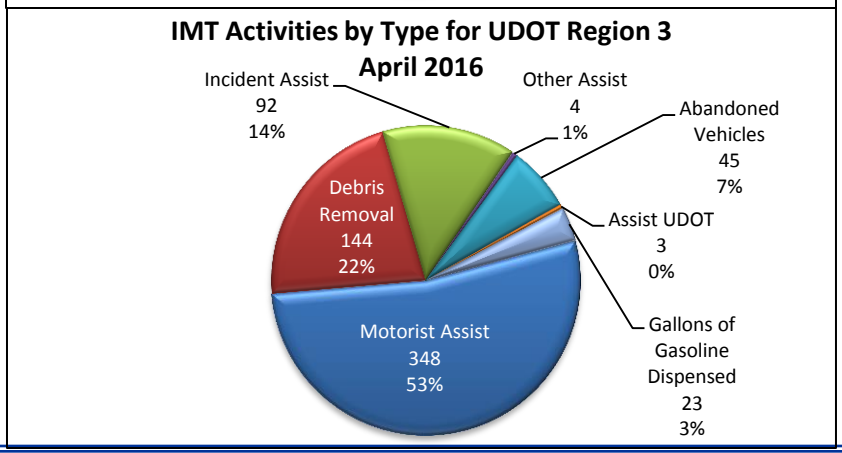





Total IMT Activity
FY 14
FY 15
FY 16
2500
2000
1500
1000
500
0
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun


IMT Activities by Type for UDOT Region 1
April 2016
Incident Assist
88
15%
Other Assist
10
2%
Abandoned
Vehicles
25
4%
Assist UDOT
18
3%
Gallons of
Gasoline
Dispensed
23
4%
Motorist Assist
323
55%
Debris Removal
100
17%


IMT Activities by Type for UDOT Region 2
April 2016
Other Assist
7
1%
Abandoned
Vehicles
49
4%
Assist UDOT
11
1%
Gallons of
Gasoline
Dispensed
43
4%
Incident Assist
266
25%
Motorist Assist
629
59%
Debris Removal
67
6%

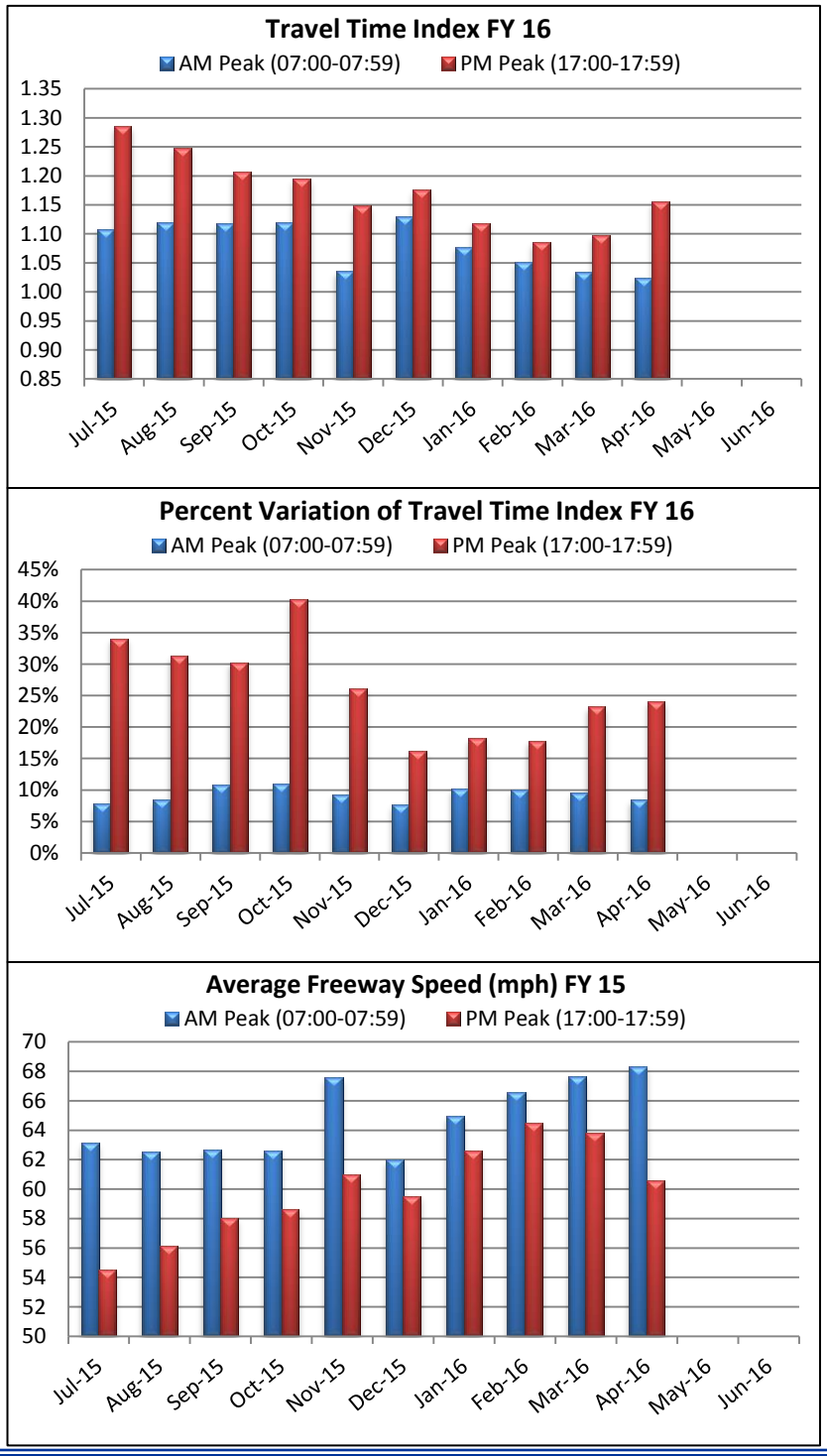

IMT Activities by Type for UDOT Region 3
April 2016
Incident Assist
92
14%
Other Assist
4
1%
Abandoned
Vehicles
45
7%
Assist UDOT
3
0%
Gallons of
Gasoline
Dispensed
23
3%
Debris
Removal
144
22%
Motorist Assist
348
53%

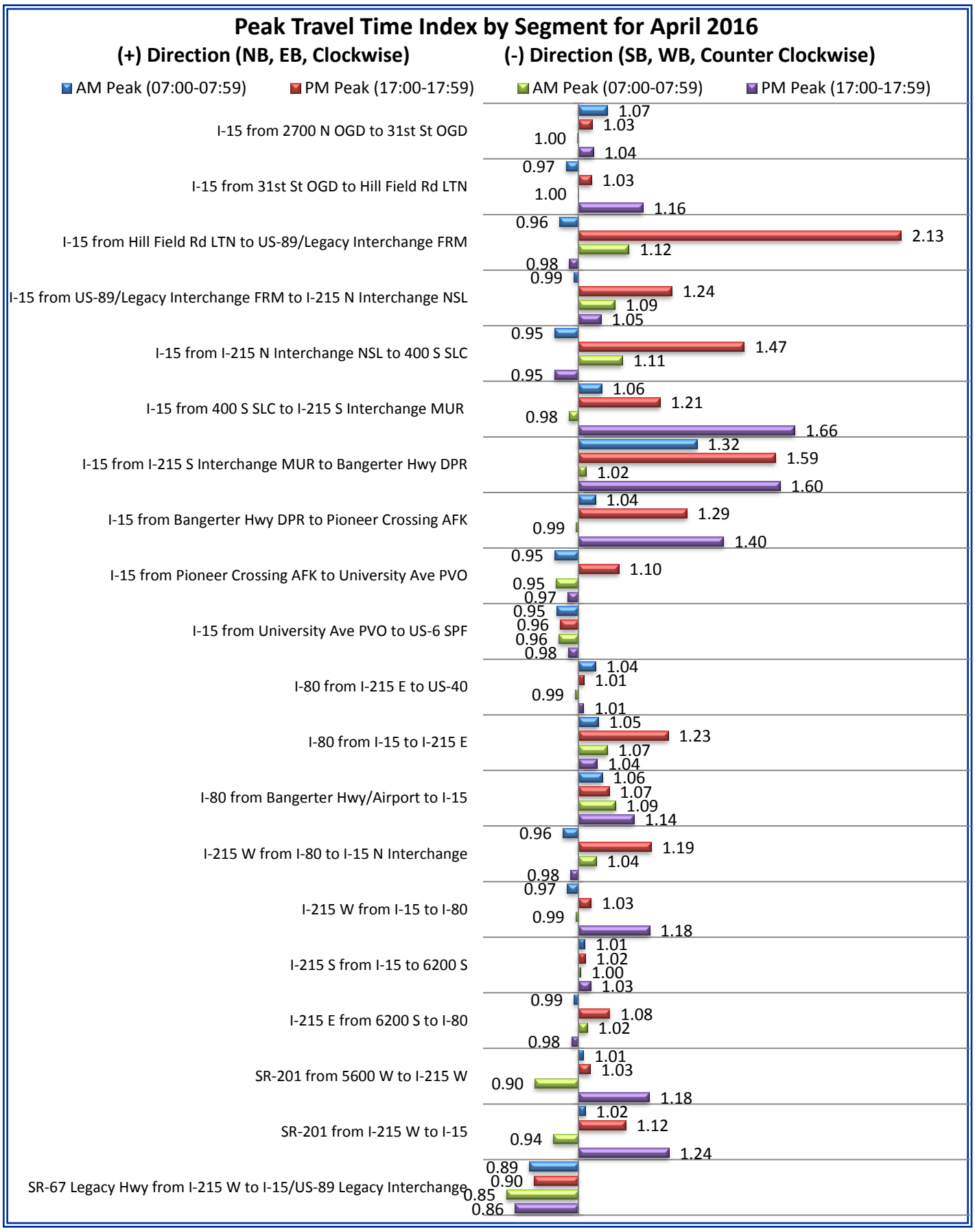
Freeway flow measures are taken from the Traffic Monitoring Stations (TMS) located throughout the Wasatch Front. As more TMS sites are installed throughout the state, they will be included in these performance measures.

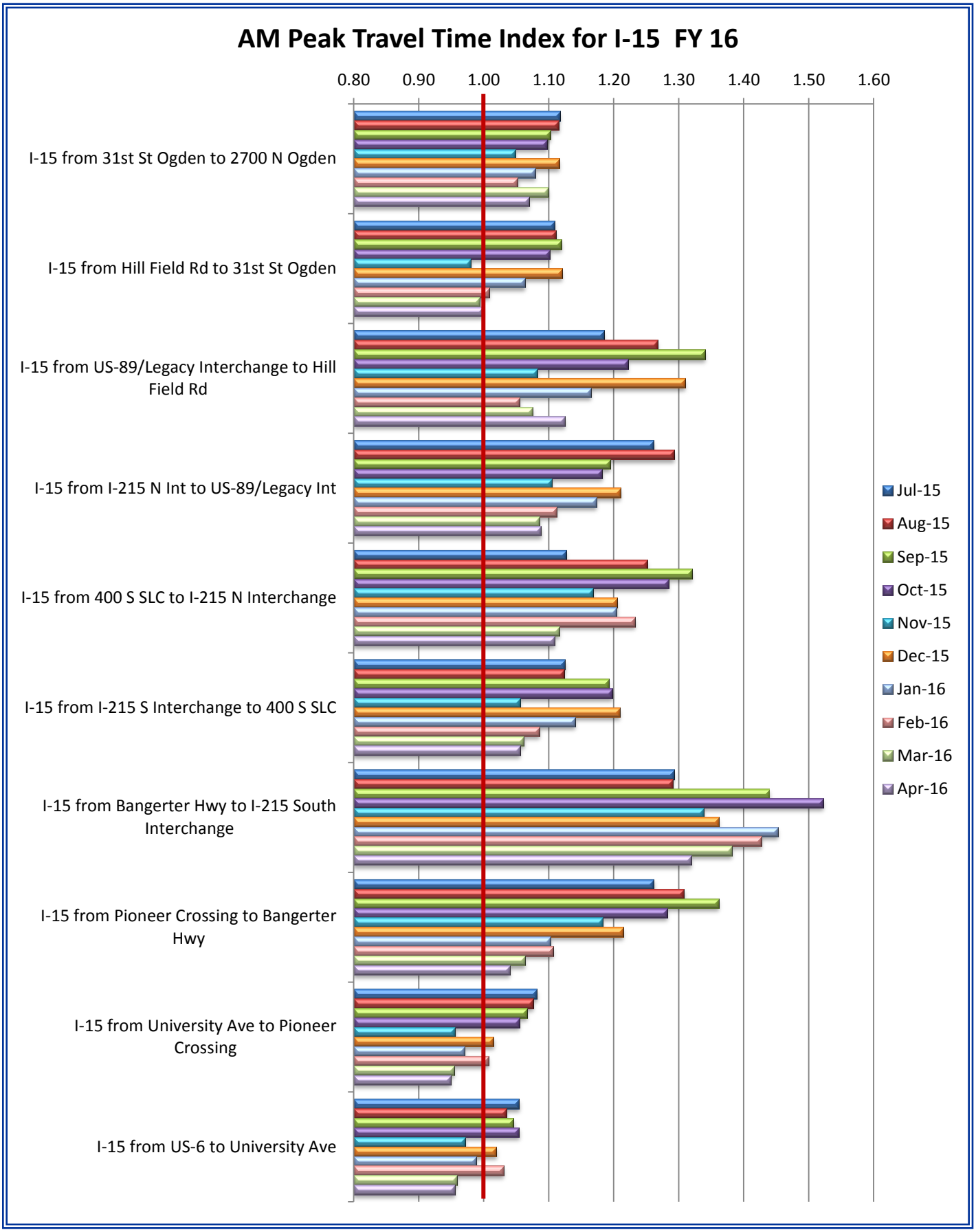
Travel Time Index: This measure of mobility is based on freeway speeds and is weighted by segment lengths and by the traffic volume. A value of 1.0 represents free-flow speeds. A value of 1.12 indicates that the average vehicle trip takes 12% longer than if that were the only vehicle on the freeway.

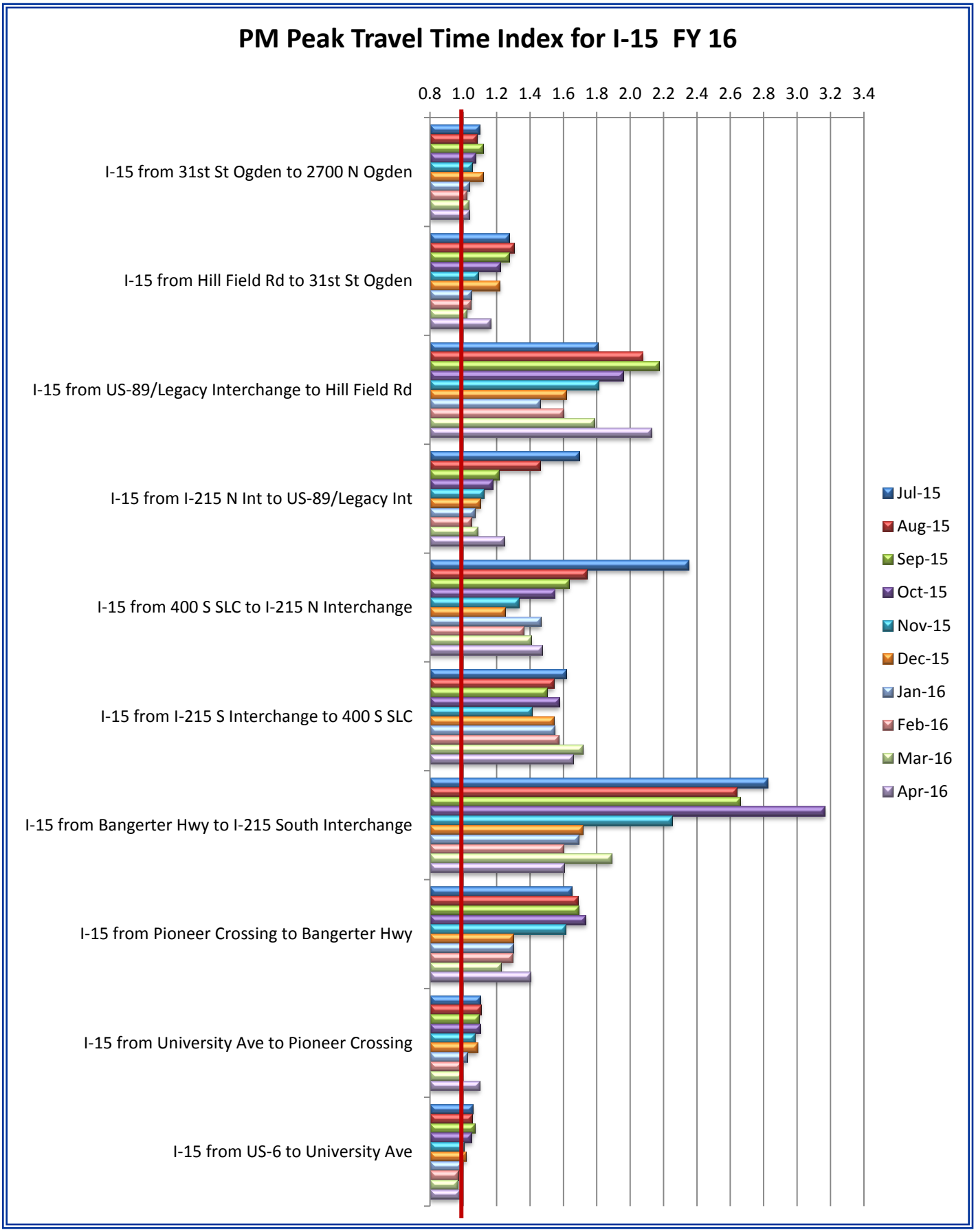
Percent Variation of Travel Time Index: The percent variation in the Travel Time Index is a measure of how much the Travel Time Index changes from day-to-day.

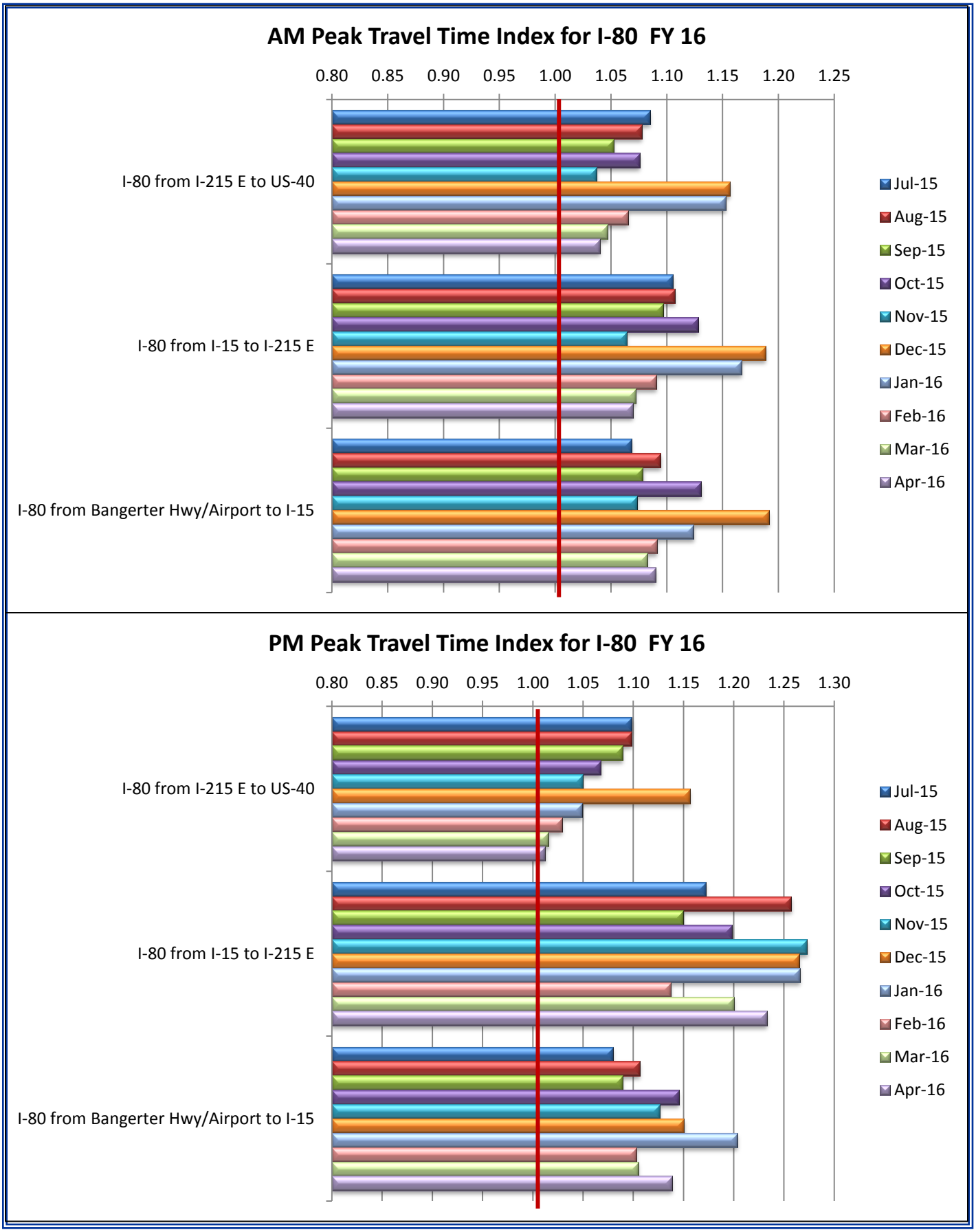
Average Freeway Speed: The freeway speed is weighted by volume.

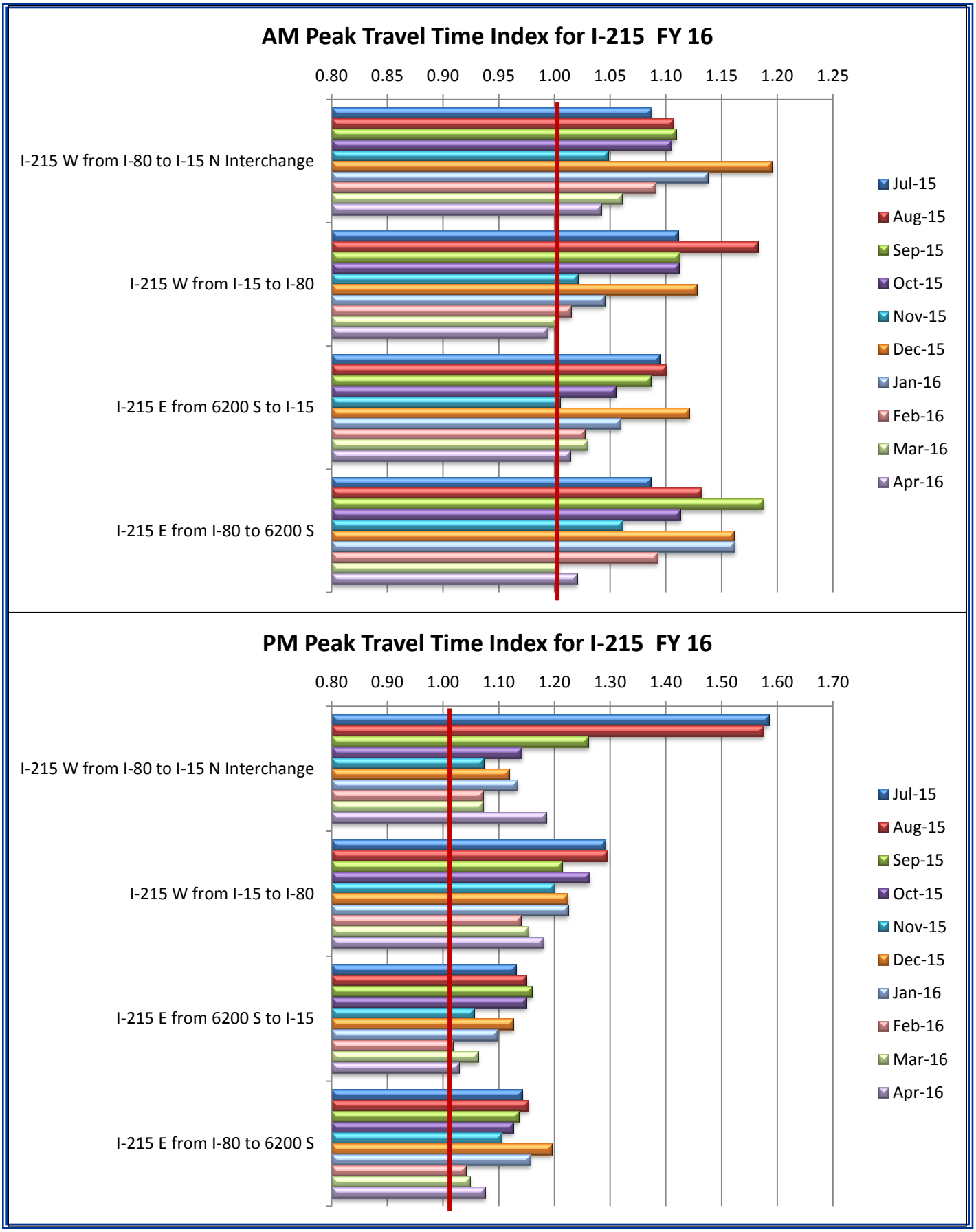


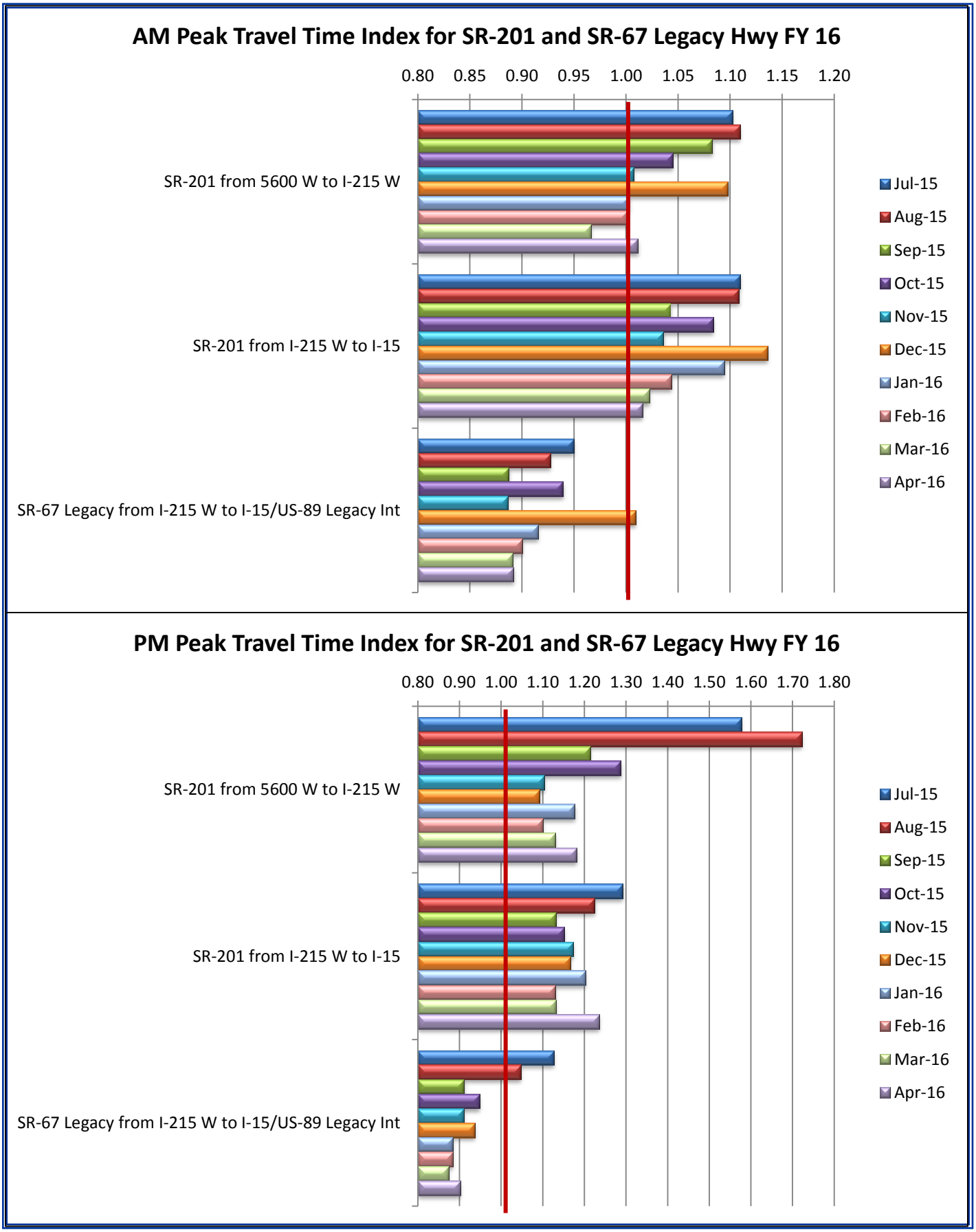

Peak Travel Time Index by Segment for April 2016
(+) Direction (NB, EB, Clockwise)
(-) Direction (SB, WB, Counter Clockwise)
AM Peak (07:00-07:59)
PM Peak (17:00-17:59)
AM Peak (07:00-07:59)
PM Peak (17:00-17:59)
I-15 from 2700 N OGD to 31st St OGD
1.07
1.03
1.00
1.04
I-15 from 31st St OGD to Hill Field Rd LTN
0.97
1.03
1.00
1.16
I-15 from Hill Field Rd LTN to US-89/Legacy Interchange FRM
0.96
2.13
1.12
0.98
I-15 from US-89/Legacy Interchange FRM to I-215 N Interchange NSL
0.99
1.24
1.09
1.05
I-15 from I-215 N Interchange NSL to 400 S SLC
0.95
1.47
1.11
0.95
I-15 from 400 S SLC to I-215 S Interchange MUR
1.06
1.21
0.98
1.66
I-15 from I-215 S Interchange MUR to Bangerter Hwy DPR
1.32
1.59
1.02
1.60
I-15 from Bangerter Hwy DPR to Pioneer Crossing AFK
1.04
1.29
0.99
1.40
I-15 from Pioneer Crossing AFK to University Ave PVO
0.95
1.10
0.95
0.97
I-15 from University Ave PVO to US-6 SPF
0.95
0.96
0.96
0.98
I-80 from I-215 E to US-40
1.04
1.01
0.99
1.01
I-80 from I-15 to I-215 E
1.05
1.23
1.07
1.04
I-80 from Bangerter Hwy/Airport to I-15
1.06
1.07
1.09
1.14
I-215 W from I-80 to I-15 N Interchange
0.96
1.19
1.04
0.98
I-215 W from I-15 to I-80
0.97
1.03
0.99
1.18
I-215 S from I-15 to 6200 S
1.01
1.02
1.00
1.03
I-215 E from 6200 S to I-80
0.99
1.08
1.02
0.98
SR-201 from 5600 W to I-215 W
1.01
1.03
0.90
1.18
SR-201 from I-215 W to I-15
1.02
1.12
0.94
1.24
SR-67 Legacy Hwy from I-215 W to I-15/US-89 Legacy Interchange
0.89
0.90
0.85
0.86


AM Peak Travel Time Index for I-15 FY 16
0.80
0.90
1.00
1.10
1.20
1.30
1.40
1.50
1.60
I-15 from 31st St Ogden to 2700 N Ogden
I-15 from Hill Field Rd to 31st St Ogden
I-15 from US-89/Legacy Interchange to Hill Field Rd
I-15 from I-215 N Int to US-89/Legacy Int
I-15 from 400 S SLC to I-215 N Interchange
I-15 from I-215 S Interchange to 400 S SLC
I-15 from Bangerter Hwy to I-215 South Interchange
I-15 from Pioneer Crossing to Bangerter Hwy
I-15 from University Ave to Pioneer Crossing
I-15 from US-6 to University Ave
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15
Jan-16
Feb-16
Mar-16
Apr-16

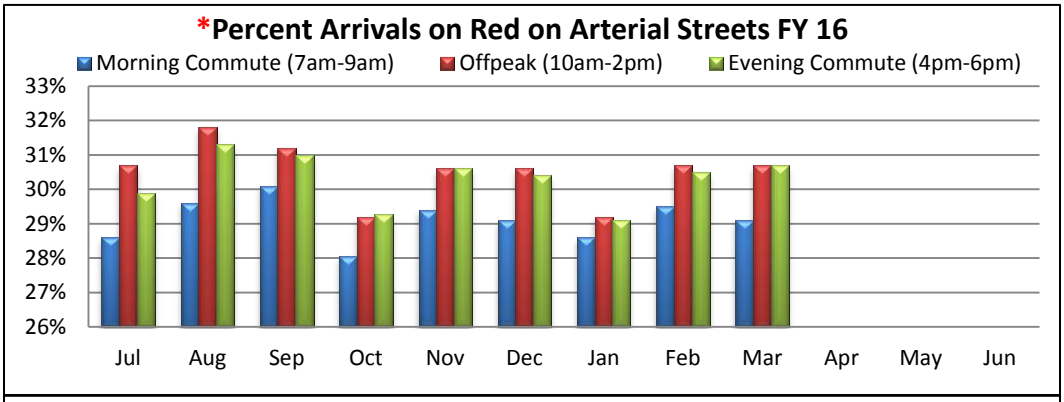

PM Peak Travel Time Index for I-15 FY 16
0.8 1.0 1.2 1.4 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0 3.2 3.4
I-15 from 31st St Ogden to 2700 N Ogden
I-15 from Hill Field Rd to 31st St Ogden
I-15 from US-89/Legacy Interchange to Hill Field Rd
I-15 from I-215 N Int to US-89/Legacy Int
I-15 from 400 S SLC to I-215 N Interchange
I-15 from I-215 S Interchange to 400 S SLC
I-15 from Bangerter Hwy to I-215 South Interchange
I-15 from Pioneer Crossing to Bangerter Hwy
I-15 from University Ave to Pioneer Crossing
I-15 from US-6 to University Ave
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15
Jan-16
Feb-16
Mar-16
Apr-16

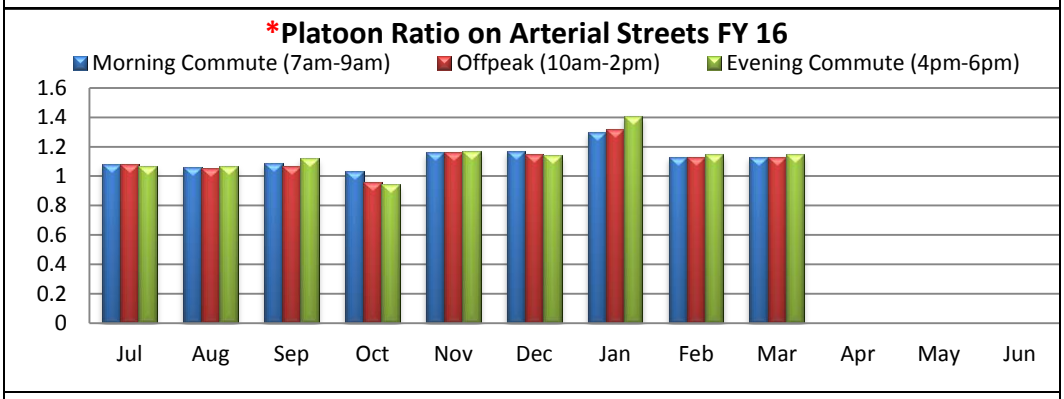

AM Peak Travel Time Index for I-80 FY 16
0.80 0.85 0.90 0.95 1.00 1.05 1.10 1.15 1.20 1.25
I-80 from I-215 E to US-40
I-80 from I-15 to I-215 E
I-80 from Bangerter Hwy/Airport to I-15
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15
Jan-16
Feb-16
Mar-16
Apr-16
PM Peak Travel Time Index for I-80 FY 16
0.80 0.85 0.90 0.95 1.00 1.05 1.10 1.15 1.20 1.25 1.30
I-80 from I-215 E to US-40
I-80 from I-15 to I-215 E
I-80 from Bangerter Hwy/Airport to I-15
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15
Jan-16
Feb-16
Mar-16
Apr-16

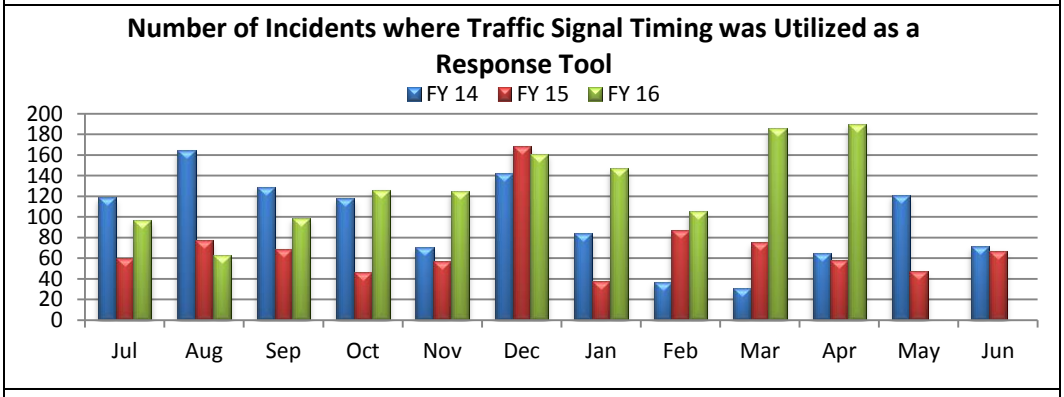

AM Peak Travel Time Index for I-215 FY 16
0.80
0.85
0.90
0.95
1.00
1.05
1.10
1.15
1.20
1.25
I-215 W from I-80 to I-15 N Interchange
I-215 W from I-15 to I-80
I-215 E from 6200 S to I-15
I-215 E from I-80 to 6200 S
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15
Jan-16
Feb-16
Mar-16
Apr-16
PM Peak Travel Time Index for I-215 FY 16
0.80
0.90
1.00
1.10
1.20
1.30
1.40
1.50
1.60
1.70
I-215 W from I-80 to I-15 N Interchange
I-215 W from I-15 to I-80
I-215 E from 6200 S to I-15
I-215 E from I-80 to 6200 S
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15
Jan-16
Feb-16
Mar-16
Apr-16

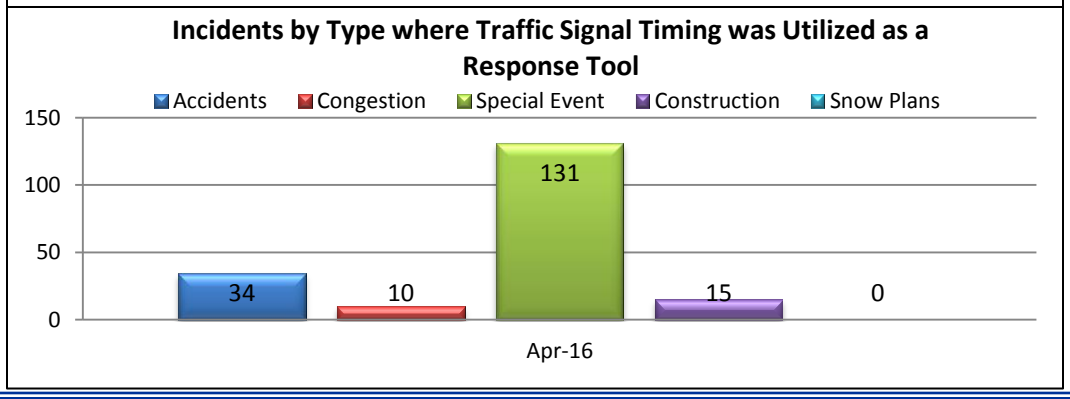

AM Peak Travel Time Index for SR-201 and SR-67 Legacy Hwy FY 16
0.80 0.85 0.90 0.95 1.00 1.05 1.10 1.15 1.20
SR-201 from 5600 W to I-215 W
SR-201 from I-215 W to I-15
SR-67 Legacy from I-215 W to I-15/US-89 Legacy Int
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15
Jan-16
Feb-16
Mar-16
Apr-16
PM Peak Travel Time Index for SR-201 and SR-67 Legacy Hwy FY 16
0.80 0.90 1.00 1.10 1.20 1.30 1.40 1.50 1.60 1.70 1.80
SR-201 from 5600 W to I-215 W
SR-201 from I-215 W to I-15
SR-67 Legacy from I-215 W to I-15/US-89 Legacy Int
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15
Jan-16
Feb-16
Mar-16
Apr-16

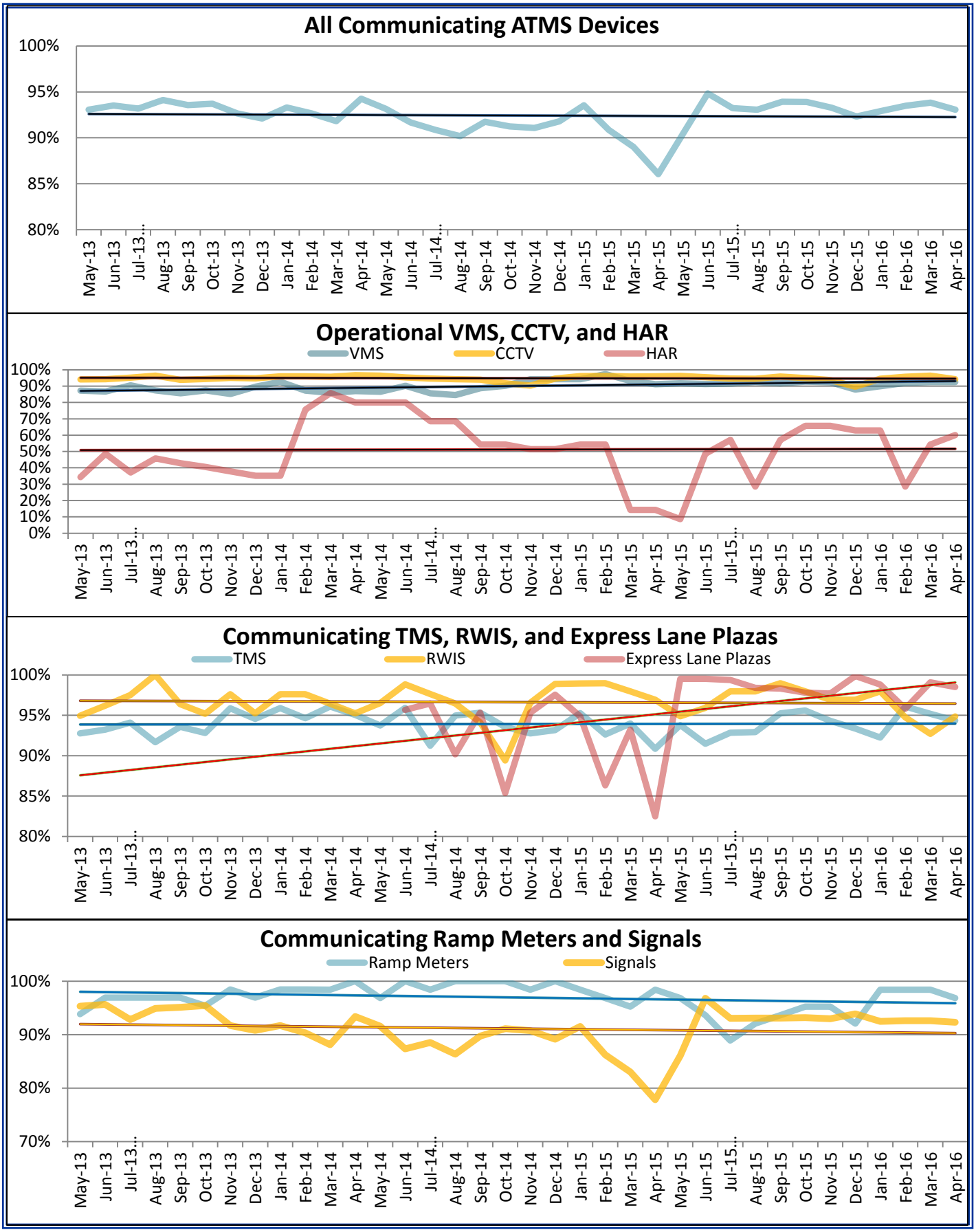
The percent arrival on red along the arterial statistics are generated automatically through the automated traffic signal performance measures, which show real-time and historical functionality at signalized intersections. The system automatically time-stamps when each vehicle arrives at the intersection and then compares the detection time-stamp if the phase was green or red. The percent arrival on red data is averaged over the 24 hours of the day and days in the month. . The lower charts shows the number of incidents where traffic signal timing was modified in order to help traffic flow around closed lanes, or to help relieve excessive congestion.

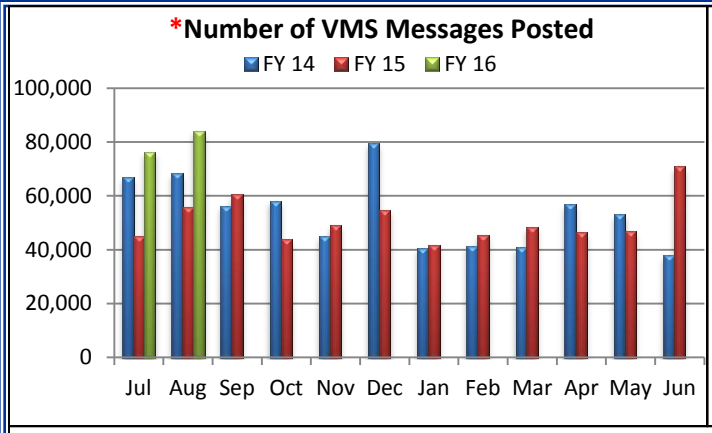


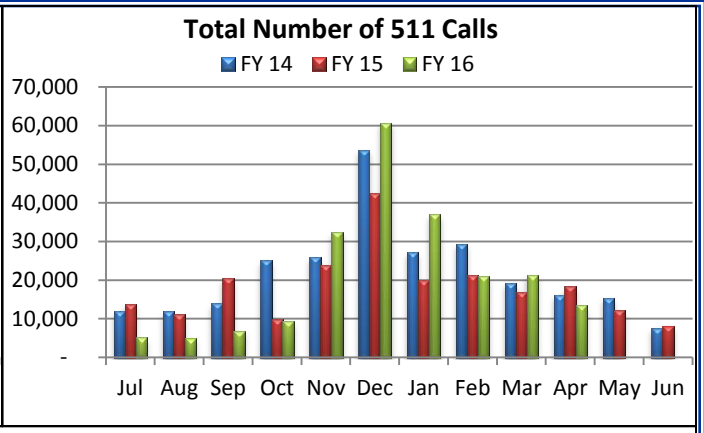


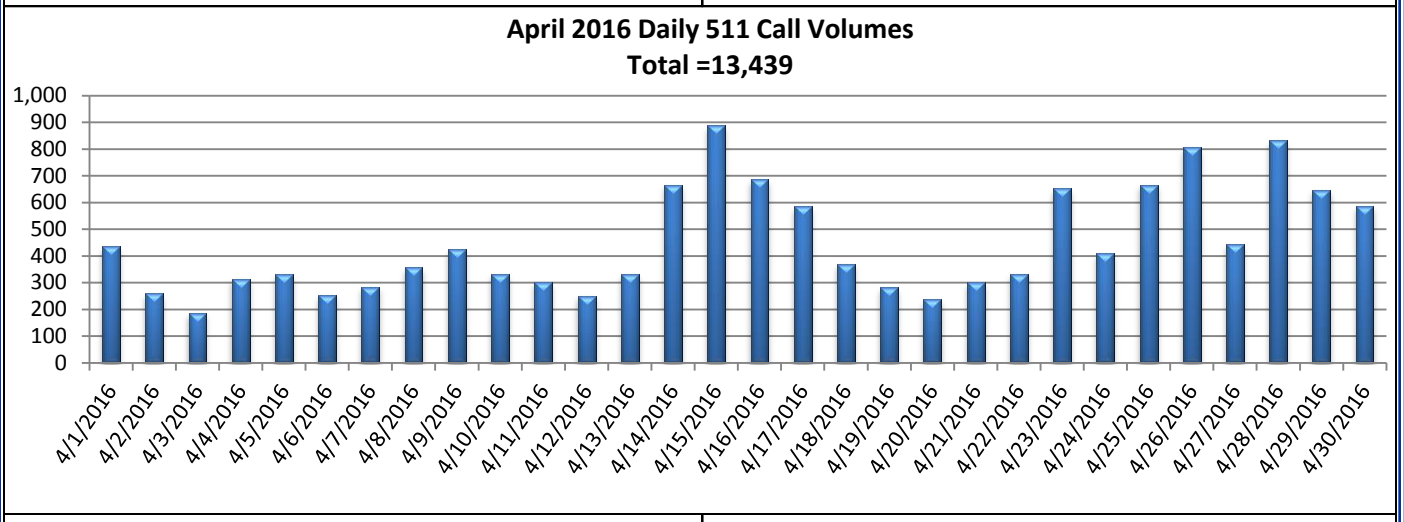





All Communicating ATMS Devices
100%
95%
90%
85%
80%
May-13
Jun-13
Jul-13...
Aug-13
Sep-13
Oct-13
Nov-13
Dec-13
Jan-14
Feb-14
Mar-14
Apr-14
May-14
Jun-14
Jul-14...
Aug-14
Sep-14
Oct-14
Nov-14
Dec-14
Jan-15
Feb-15
Mar-15
Apr-15
May-15
Jun-15
Jul-15...
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15
Jan-16
Feb-16
Mar-16
Apr-16
Operational VMS, CCTV, and HAR
VMS
CCTV
HAR
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Communicating TMS, RWIS, and Express Lane Plazas
TMS
RWIS
Express Lane Plazas
100%
95%
90%
85%
80%
Communicating Ramp Meters and Signals
Ramp Meters
Signals
100%
90%
80%
70%


*Number of VMS Messages Posted
FY 14
FY 15
FY 16
100,000
80,000
60,000
40,000
20,000
0
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun


Total Number of 511 Calls
FY 14
FY 15
FY 16
70,000
60,000
50,000
40,000
30,000
20,000
10,000
-
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun


April 2016 Daily 511 Call Volumes
Total =13,439
1,000
900
800
700
600
500
400
300
200
100
0
4/1/2016
4/2/2016
4/3/2016
4/4/2016
4/5/2016
4/6/2016
4/7/2016
4/8/2016
4/9/2016
4/10/2016
4/11/2016
4/12/2016
4/13/2016
4/14/2016
4/15/2016
4/16/2016
4/17/2016
4/18/2016
4/19/2016
4/20/2016
4/21/2016
4/22/2016
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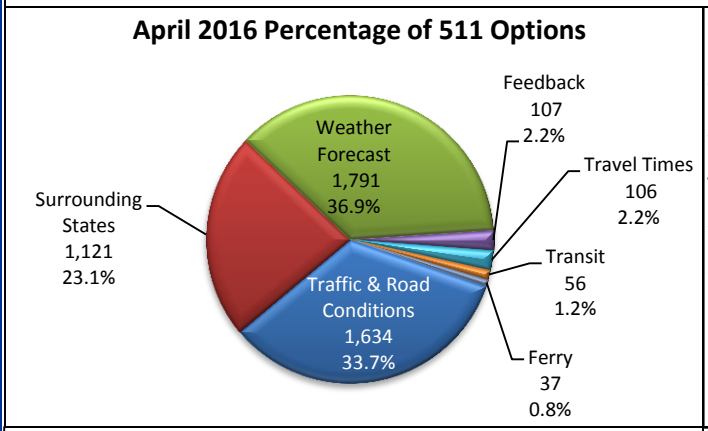
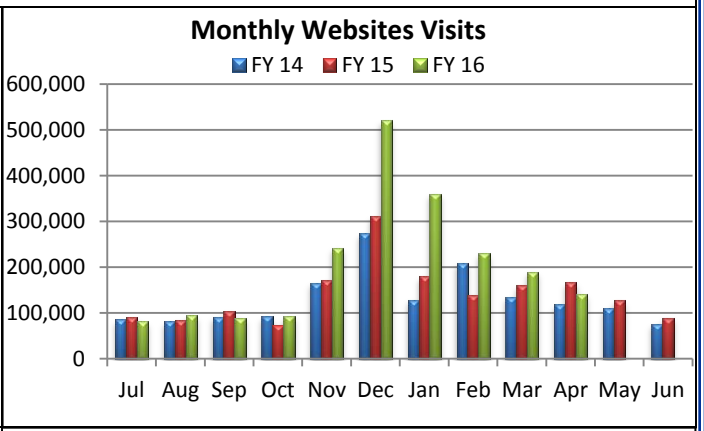
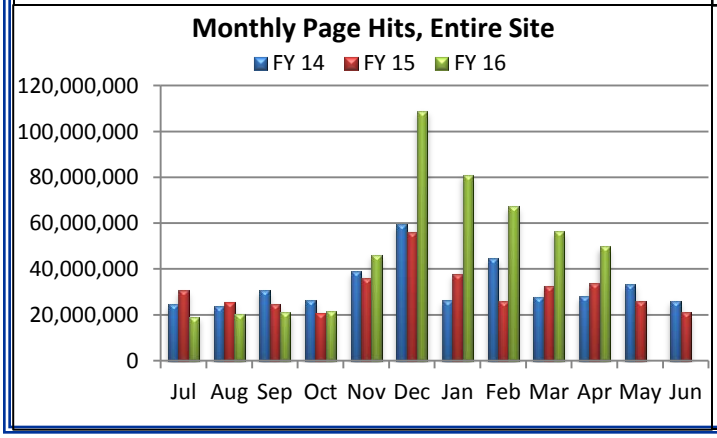
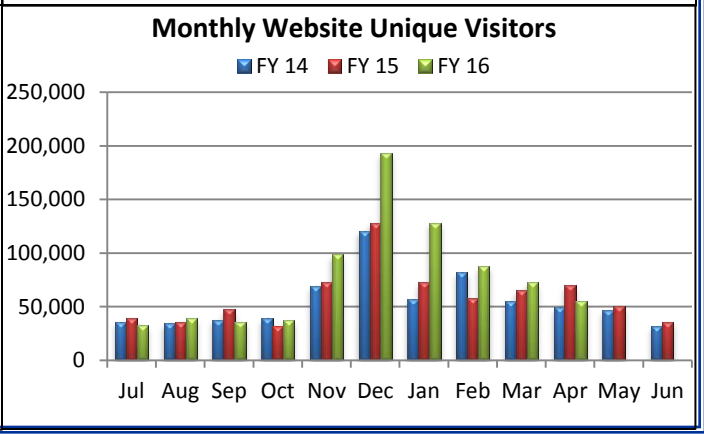
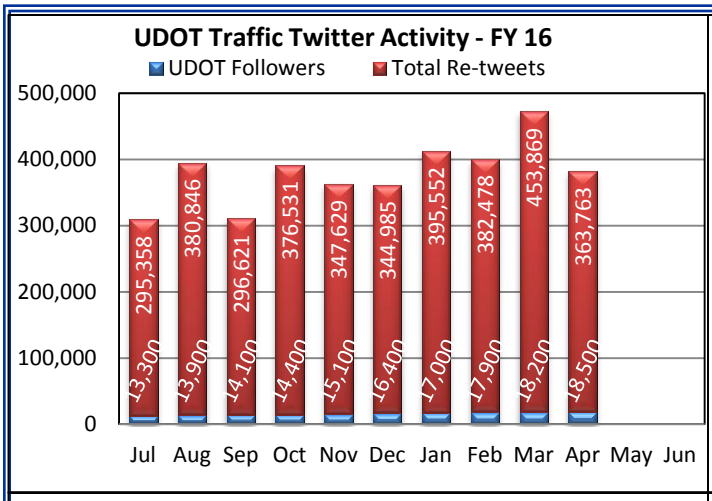
4/26/2016
4/27/2016
4/28/2016
4/29/2016
4/30/2016

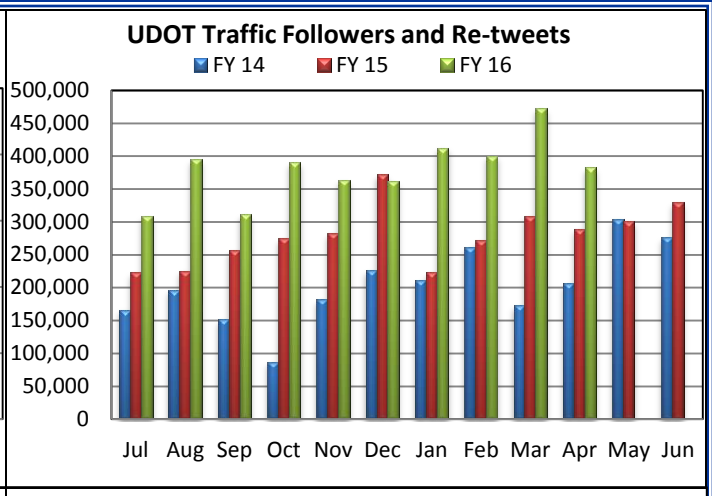

April 2016 Percentage of 511 Options
Weather Forecast 1,791 36.9%
Feedback 107 2.2%
Travel Times 106 2.2%
Transit 56 1.2%
Ferry 37 0.8%
Traffic & Road Conditions 1,634 33.7%
Surrounding States 1,121 23.1%

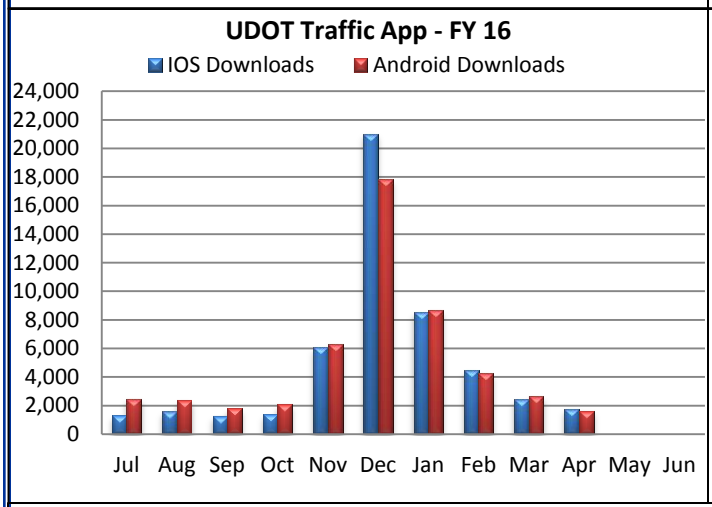

Monthly Websites Visits
FY 14
FY 15
FY 16
600,000
500,000
400,000
300,000
200,000
100,000
0
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun

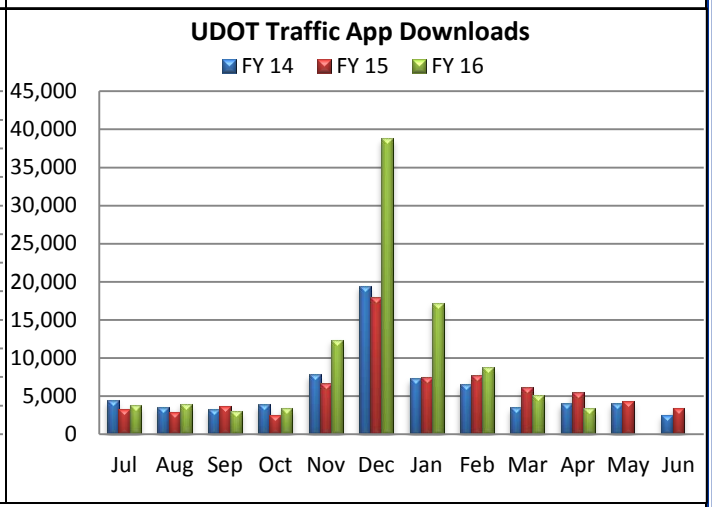

Monthly Page Hits, Entire Site
FY 14
FY 15
FY 16
120,000,000
100,000,000
80,000,000
60,000,000
40,000,000
20,000,000
0
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun

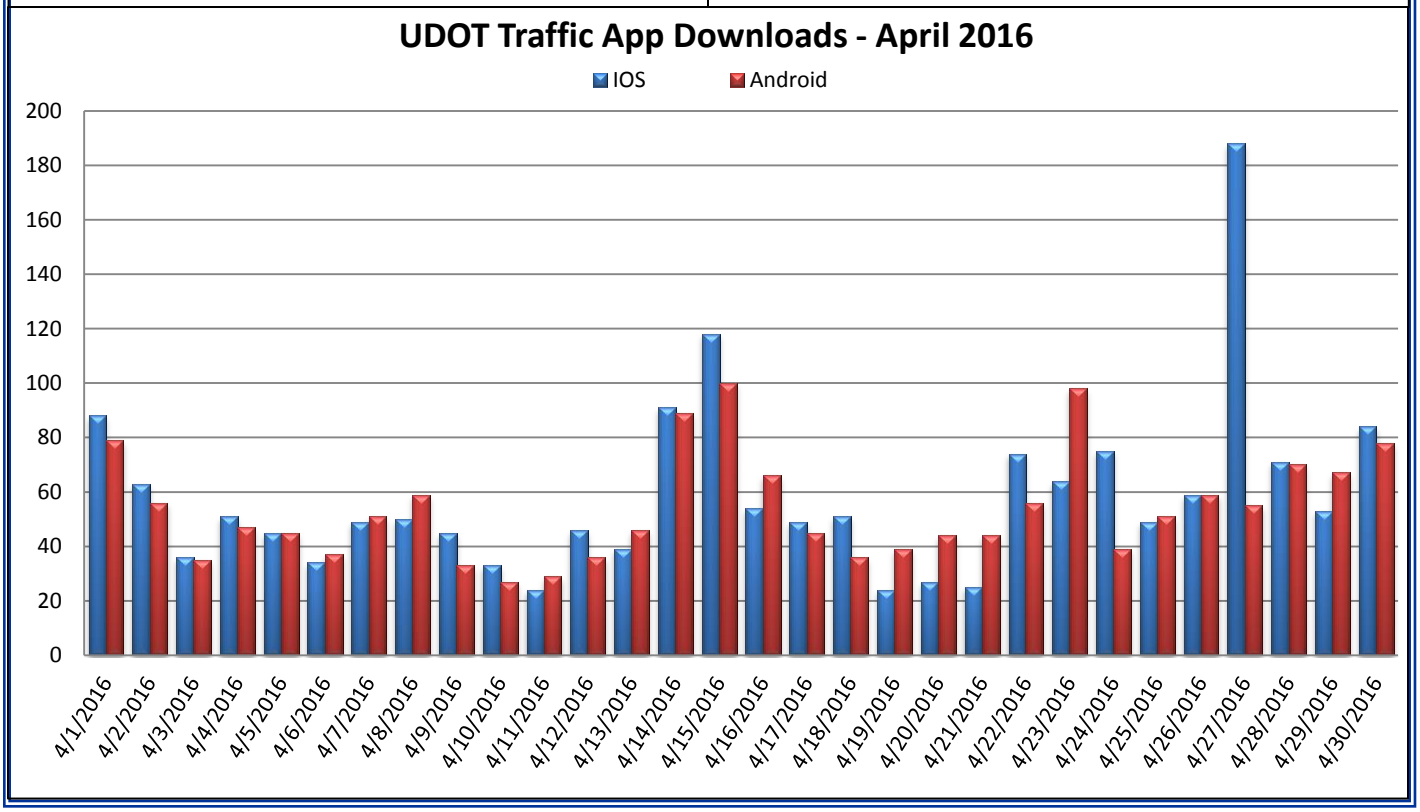

Monthly Website Unique Visitors
FY 14
FY 15
FY 16
250,000
200,000
150,000
100,000
50,000
0
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun

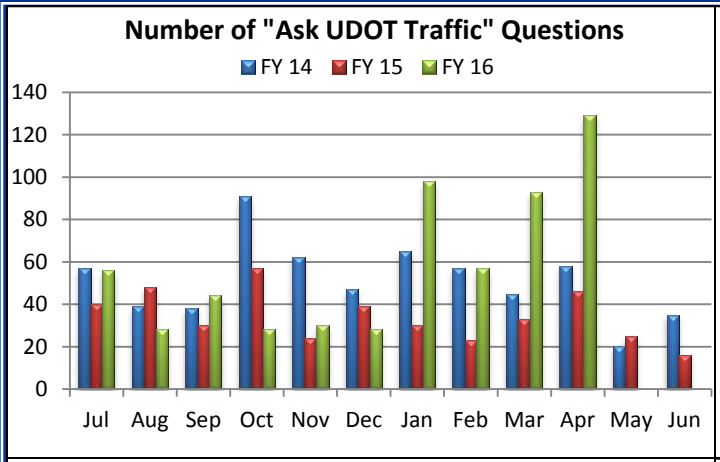

UDOT Traffic Twitter Activity - FY 16
UDOT Followers
Total Re-tweets
500,000
400,000
300,000
200,000
100,000
0
295,358
380,846
296,621
376,531
347,629
344,985
395,552
382,478
453,869
363,763
13,300
13,900
14,100
14,400
15,100
16,400
17,000
17,900
18,200
18,500
Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun

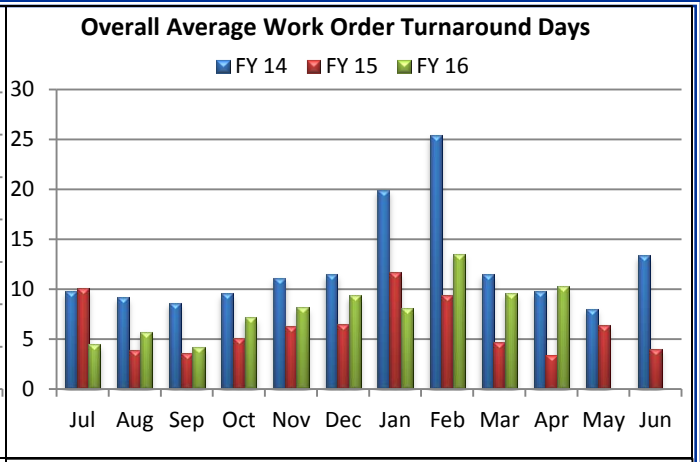

UDOT Traffic Followers and Re-tweets
FY 14
FY 15
FY 16
500,000
450,000
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun

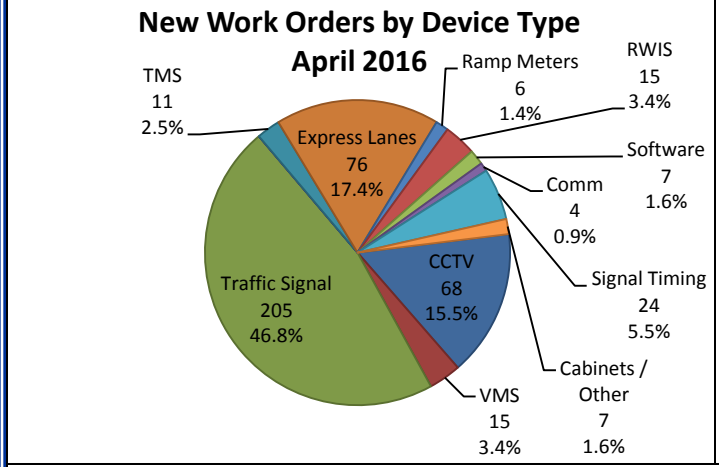

UDOT Traffic App - FY 16
IOS Downloads
Android Downloads
24,000
22,000
20,000
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun

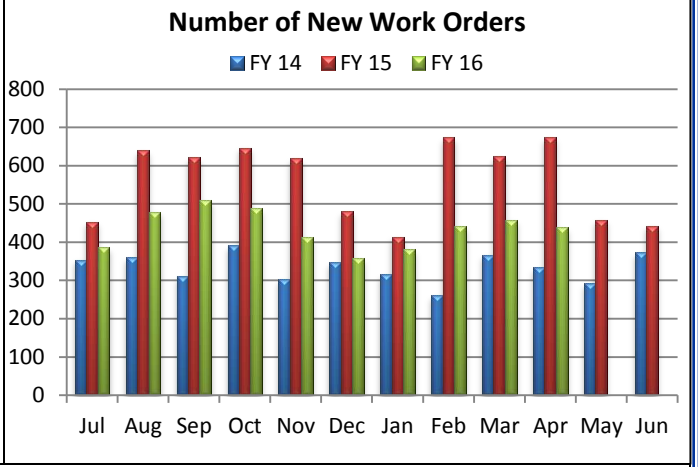

UDOT Traffic App Downloads
FY 14
FY 15
FY 16
45,000
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun

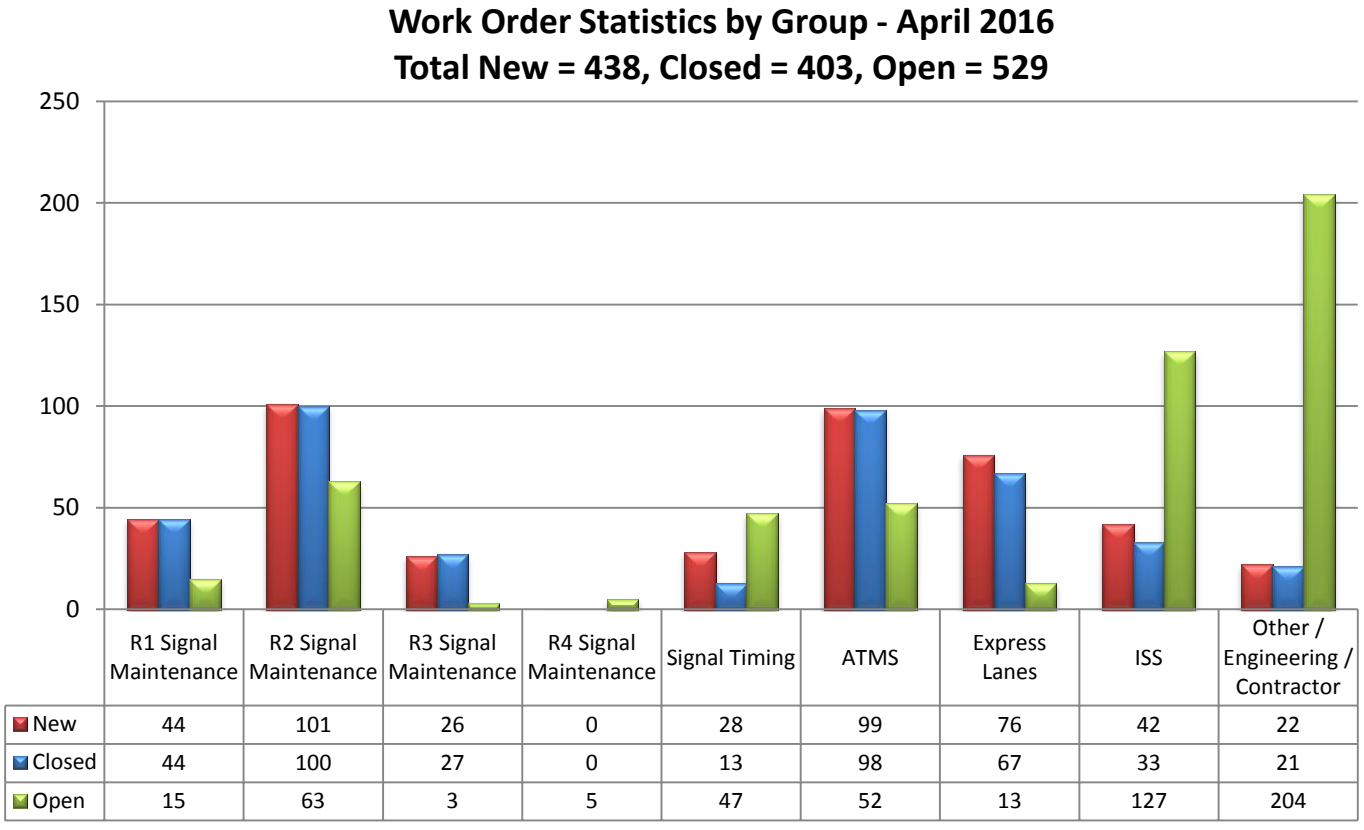

UDOT Traffic App Downloads - April 2016
IOS
Android
200
180
160
140
120
100
80
60
40
20
0
4/1/2016 4/2/2016 4/3/2016 4/4/2016 4/5/2016 4/6/2016 4/7/2016 4/8/2016 4/9/2016 4/10/2016 4/11/2016 4/12/2016 4/13/2016 4/14/2016 4/15/2016 4/16/2016 4/17/2016 4/18/2016 4/19/2016 4/20/2016 4/21/2016 4/22/2016 4/23/2016 4/24/2016 4/25/2016 4/26/2016 4/27/2016 4/28/2016 4/29/2016 4/30/2016











	R1 Signal Maintenance	R2 Signal Maintenance	R3 Signal Maintenance	R4 Signal Maintenance	Signal Timing	ATMS	Express Lanes	ISS	Other / Engineering / Contractor
New	44	101	26	0	28	99	76	42	22
Closed	44	100	27	0	13	98	67	33	21
Open	15	63	3	5	47	52	13	127	204

CONTROL ROOM

The Control Room Operators managed 1173 incidents and handled 1239 phone calls, in addition to common daily tasks of posting VMS messages, emergency alerts, 511 messages, monitoring events, adjusting signal timing plans and registering work orders for ATMS maintenance. Message Monday's and other PSA messages were active throughout the month; and air quality alerts were posted several days. TOCL was activated six times in the month of April for various incidents.

The Wasatch Front experienced a high wind event toward the end of the month that resulted in closing I-15, high vehicle restrictions in Davis and Box Elder counties, and multiple crashes in the impacted areas. The Control Room, with the Weather Group, supported the Regions and UHP by using all communication tools to distribute traveler information to the public and media.

John Leonard was recently named TOC Operations Engineer, replacing Glenn Blackwelder who has moved to UDOT Traffic and Safety. Nathan Harward has joined the Control Room as an operator.

TRAVELER INFORMATION

The Traveler Information Team represented UDOT at the Government Social Media conference and continued filming and coordinating the new TOC introduction video.

WEATHER INFORMATION

The Weather Group had 267 overall weather interactions, 81 outgoing weather alerts, eight NWS collaborations, and twelve road weather alerts.

CLIMATOLOGY

Overall, Utah statewide generally observed normal to above normal temperatures, particularly in northwest Utah, and normal to above normal precipitation. The state saw multiple low-pressure systems leading to decent rainfall for the month, but otherwise insignificant road weather, with the exception of a down slope wind event in Davis County at the end of the month. The strongest wind gust during this event occurred at the newly installed RWIS at US-89 along the Northbound off-ramp to Park Lane, which measured 91 miles per hour Saturday morning, April 30th.

WEATHER OPERATIONS

There were several tours through the TOC Weather Room in April. Employees from shed 2430 (Salt Lake Central) and 2434 (Parley's) stopped by to see what the Weather Group does. Lastly, students from UVU also toured through the TOC.

The Weather Group attended several conferences in April, including the Aurora Program, Standing International Road Weather Commission's biennial conference, and TRB International Conference and Workshop on Winter Maintenance and Surface Transportation Weather. The group presented alongside the National Weather Service at the Weather Summit for Northern Utah.

The Park Lane RWIS was added to the system, and the Beaver Ridge RWIS was returned to service after lengthy construction in the area caused it to be temporarily removed.

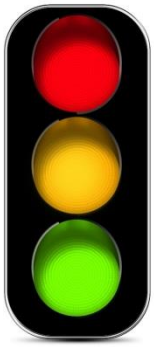
TRAFFIC OPERATIONS AND REPORTING

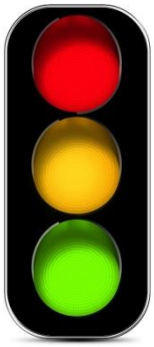
Involvement includes:

- The Governor's performance metric.
- Managed Motorways project.
- Pleasant Grove Blvd. access request.
- I-215/SR-201 interchange analysis.
- I-15, 9000 S to I-215 weave analysis.
- Moab Main Street analysis.
- Congestion Reporting.
- I-80/I-215/Foothill interchange analysis.
- 7200 South, 700 W to I-15 analysis.
- Zero Fatalities Summit.
- Provo/Orem BRT.
- 4700 South/2700 West analysis/design.
- Ogden-WSU transit.
- Bangerter Interchanges.
- I-80/State EIS.
- Performance Plans.
- Lehi Main Street access request.
- I-15 SB lane widening.
- University Parkway interchange modeling.
- US-6 corridor analysis.
- Geneva Road/Vineyard/Lakeview study.
- BYU VISSIM files for access management study.

ITS ASSET MANAGEMENT

ITS Asset Management Team integrated three new TMS, an RWIS, a freeway VMS, nine signals, and removed a CCTV from service. The team also worked on a draft 20 year device replacement plan, provided suggestions to the AIMS inventory management team, and modified truck prohibited sign mounting details.



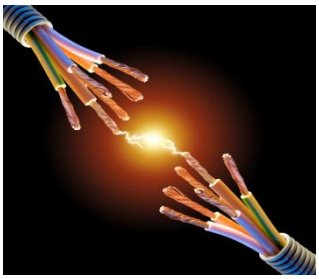


TRAFFIC SIGNAL OPERATIONS

Region 2 added new radar detection to four intersections on 4500 and 4700 South between I-15, 280 East and I-215 West. Finished adding radar detection on multiple intersections in Tooele on SR-36 from Vine St. to 2400 North and worked with South Jordan Police to add blue “tattle-tale lights” at Mountain View Corridor and Daybreak Parkway to monitor red-light running.

Region 3 rebuilt the traffic signal and added flashing yellow arrow signals at US-6 and Center Street in Spanish Fork for the roadway and bridge deck widening project. Replaced the knocked down pedestrian pole on 2230 North and University Ave. Installed Eastbound left turn phasing at 1300 West and State Street in Pleasant Grove. Installed an additional type I head at 1400 North and 1750 West in Springville. Relamped nine signals with 15 year LED modules. Installed new signal cabinets at 800 South and State Street, 400 South & State Street, Center & State Street, and 1200 North and State Street in Orem. Upgraded the cabinet at 100 South and Main Street in Heber. The team also adjusted signal timing and detection for construction projects in Provo, Saratoga Springs, and Spanish Fork.

Region 4 installed generator transfer switches at several cabinets in Cedar City, replaced conduit that had washed away near Cove Fort for the freeway street lighting system. Changed MMUs in Kanab, St. George, Hurricane, LaVerkin, and Santa Clara. Upgraded the cabinet at I-15 and Dixie Dr. in St. George. Installed a crosswalk switch in LaVerkin to increase pedestrian walk time during school crossing times, and updated several reduced speed school zone signs.



ATMS MAINTENANCE

Field Team

The Field Team conducted two LFOTs on SR-36 at 1000 North and SR-6 at Center Street in Spanish Fork. Began replacing a knocked down pole mounted surface street travel time sign at University Parkway at 500 West in Provo. Updated the spreadsheet inventory for upcoming preventative maintenance inspections, and closed 81 work orders.

Lab Team

The Lab Team tested and repaired 20 devices. Tested and delivered eight signal cabinets, out-loaded a VMS for the I-70 Salina project, and retrieved the mobile VMS from Little Cottonwood Canyon, where it had been used over the winter for avalanche warnings. Performed 12 TMS preventative maintenance inspections and closed nine work orders.

Express Lanes Team

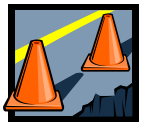
The Express Lanes Team closed 76 work orders, rebooted four VTMS, 14 lane controllers, three lasers and three readers. Repaired and configured eight lane controllers, replaced one laser; and conducted 12 cabinet preventative maintenance inspections. The team, with the Region Traffic Engineer and UHP, performed a rolling lane closure along I-15 to complete 31 additional preventative maintenance inspections. With Lab Team assistance, three readers were reset, two sets of Sensys pucks were replaced and calibrated, a Si head realigned, and four digital relays were installed.

Region 1

- **Statewide Signal Interconnect:** PineTop Engineering has been working on the design for this to advertise.

- **SR-193 and Greyhawk:** Under construction.

- **SR-232 Hillfield Rd. Interchange:** Preliminary work has begun.



- **28th Street and Washington:** Under construction.

- **SR-126 & 1300 N:** Under construction.

- **I-15; SR-30 to the Idaho State line:** This project has been designed by PineTop Engineering and is ready to advertise. This project needs major funding for ATMS. This project may be part of a partnership with a telecom.

- **Layton Interchange:** This project is in design.

- **SR-127 & 3000 W:** Under construction.

- **Logan Main Street Fiber Interconnect:** This project has been completed. Integration to the UDOT network has also been completed.

- **US-89; SR-193 to Cornia Drive:** This project is complete.

- **US-89; Antelope Drive Extension:** This project is under construction.

- **Logan CCTV's:** This project has been completed and the 30 day burn in is underway.

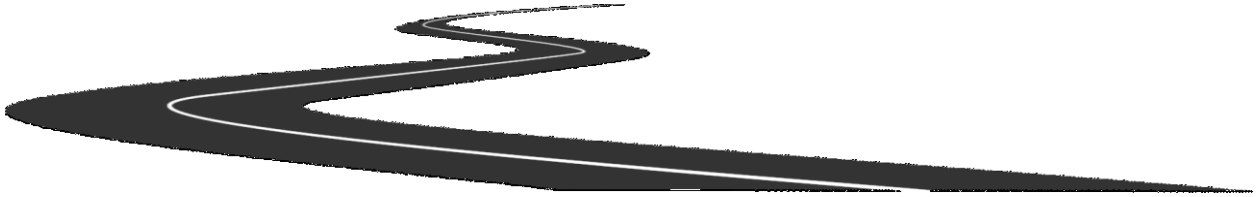
Region 2

- **SR-201 New Cameras at I-215 W:** Construction was underway on the two new Cameras along SR-201 on each side of the I-215 West Bridge. The cameras should be online later in May or early June. These cameras help cover a gap in the camera views to see traffic problems in the interchange ramp system.

- **Managed Motorway Detection – TIRTL Device Testing:** We are working with a specialty vendor and Transcore to identify sections of the freeway system to test the TIRTL device. This detector brings the level of accuracy needed to support the managed motorway system. We will initially test the device for 30 days this summer and we are preparing a temporary power supply to support the test site on I-15 at 9600 South in Sandy.

Region 3

- **SR-92 CCTV/Hybrid VMS (12641):** Having scheduling problems getting a WTO executed to repair wind storm damaged so we can restart the 30 day burn-in.
- **Region 3 traffic signal connections (12774):** Established WTO to connect three signals; SR-198 @ Woodland Hills + CCTV, SR-198 @ 400 North, and SR-198 @ Main St + CCTV in Salem via wireless radio connection.
- **US-40 CCTV/Signal connections (12805):** STRATA installed connection electronics to eight signals in the basin area. Hub equipment installation in the downtown Kearns building complete to connect STRATA network to Utah Traffic network. Vernal Hub equipment installation scheduled in May.
- **Provo Canyon RWIS/VMS (11410): 3**0 day burn-in complete. RWIS installations still pending.
- **US-189; State Park to Rock Cut passing Lanes (11415):** Project under construction.
- **Fiber connection to three Maintenance Sheds (13681):** Completed inspection and training.
- **Spanish Fork; SR-156; 300 South to M.P. 2 (9976):** City decided to add a waterline installation change order. ATMS installation anticipated in May.
- **Provo; SR-256; 800 East to Univ. Ave BRT (10266):** ATMS design of micro fiber and two CCTV's ongoing.
- **Spanish Fork; Canyon Rd @ 2550 E Signal (10960):** Project under construction.
- **Provo; US-89 (300 S); 100 East to 700 East (10137):** Undergoing effort to re-route fiber redundancy path so contractor can keep all devices operational during construction.
- **Heber; US-40; 250 South HAWK & 100 North Ped X-ing (14105):** Began 30 day burn-in.
- **Lindon; US-89 @ Center St. (12839):** Waiting on contractor to finish to install ATMS electronics.
- **Ut. Co. Signal Interconnect (13244):** Design ongoing.
- **Eagle Mountain; SR-73 @ Mt. Airey Dr. (14163):** 30 day burn-in complete.
- **Eagle Mountain; SR-73 @ Sunset Dr. (13217):** Project under construction.
- **I-15 Fiber; Payson to Santaquin (14149):** Put design contract on hold to evaluate project budget.



Region 4

- **St. George:** This project is complete, except for some city and UDOT fiber coordination.

- **Pine Creek Truck Climbing Lane:** This project is nearly complete.

- **Fiber upgrade for US-6, Helper and Price Signal Integration:** Telecom work has been completed. UDOT is ready to complete the final contractor package for a procurement contract. The package is ready and meetings with Region 4 staff have been scheduled to make sure all certifications and checklists have been satisfied.

- **Beaver Truck Climbing Lane:** Project is under construction.

- **I-15; North Beaver to Manderfield:** This project is complete. Solar sites and CCTV locations to be re-located are being mitigated.

- **Cedar City Fiber:** Cache Valley Electric has been awarded the project.

- **Beaver Shed and Fiber HUB:** We have received bids from three contractors and have awarded the contract to Hidden Peak Electric.

ITS Standards and Specifications

The team attended the special standards section meeting to discuss changes to the standard drawings. It was determined that design notes and general notes were to be separated on the drawing. The standards section instructed the TOC to submit the AT Series drawings without updating them to Jim Buckley's CADD Standards until standards section is ready.

Work continued on the revisions and updates for the 2017 edition by holding regular work group meetings with members of the TOC staff and Q/C team. All specifications and drawings will be examined in order to improve the ATMS construction.

The first draft of the new 16530 electrical power standard arrived for review and comment. A meeting was held to discuss 16530 and what happened to 02892, 13551 and 16525 as a result of the new specification.
Work continued to revise the Freeway Management portion of the AT Series Standard Drawings.
Work continued on the ATMS Solar Powered Site Standards. General Arrangements were examined and refinements under consideration. The discussion and comment meeting will be held in May.
The final flow chart for pull box lid description was completed. The flow chart was as a new Standard Drawing was rejected by the Standards Section. The Q/C team suggested that the process belongs to the Design Side and might best be presented in the ATMS Manual of Instruction. It could also be posted as a Design Aid along with the ATMS Device Acceptance Flow Chart.

Procurement

Work continued on the new RWIS instrumentation contract bid documents.
Research work continued by observing the performance of the COHU Hybrid Camera.

Vendor Sales Visits

Greg Isaccson from Hubbell Quazite Underground (U/G) enclosures visited. Greg gave a presentation that shows the many possible variations of the U/G products if the TOC wants custom design products. Hubbell is large manufacturer of Polymer Concrete Junction Boxes.

"Does 'high-rise' refer to the building or the budget?"

Acronyms

CCTV	Closed Circuit Television	DPS	Department of Public Safety
EIS	Emergency Information System	HAR	Highway Advisory Radio
I2TMS	Integrated Interagency Traffic Management System		
ITS	Intelligent Transportation System	LFOT	Local Field Operations Test
MIC	Manager in Charge	MOT	Maintenance of Traffic
RWIS	Road-Weather Information System	TAC	Technical Advisory Committee
TMD	Traffic Management Division	TMS	Traffic Monitoring Station
TOC	Traffic Operations Center	VMS	Variable Message Sign

UDOT Keeping Utah Moving